

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|--------------------------------|----------------------|-------------------------|------------------|
| 10/003,562 | 10/24/2001 | Emmanuele Giacobbi | CM2441 | 5057 |
| 27752 | 7590 11/17/2004 | | EXAMINER | |
| THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION | | | CHAUDHRY, SAEED T | |
| | ILL TECHNICAL CENT | ER - BOX 161 | ART UNIT | PAPER NUMBER |
| | ER HILL AVENUE ΓΙ, ΟΗ 45224 | | 1746 | |
| | , | · | DATE MAILED: 11/17/2004 | 4 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | A | |
|---|---|--|-----|
| | | Applicant(s) | |
| Office Action Summary | 10/003,562 | GIACOBBI ET AL. | |
| Office Action Summary | Examiner | Art Unit | |
| | Saeed T Chaudhry | 1746 | |
| The MAILING DATE of this communication ap Period for Reply | pears on the cover sheet wi | th the correspondence address | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailir earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a re- ly within the statutory minimum of thirty will apply and will expire SIX (6) MON' | ply be timely filed (30) days will be considered timely. THS from the mailing date of this communication | on. |
| Status | | | |
| 1)⊠ Responsive to communication(s) filed on <u>02 S</u> | September 2004. | | |
| - \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | s action is non-final. | | |
| 3) Since this application is in condition for allowa | | ers, prosecution as to the merits i | S |
| closed in accordance with the practice under I | Ex parte Quayle, 1935 C.D. | 11, 453 O.G. 213. | _ |
| Disposition of Claims | | | |
| 4)⊠ Claim(s) <u>1,2,20-22 and 31-43</u> is/are pending ir | the application | | |
| 4a) Of the above claim(s) is/are withdra | wn from consideration | | |
| 5) Claim(s) is/are allowed. | wii itotii consideration. | | |
| 6)⊠ Claim(s) <u>1,2,20-22 and 31-43</u> is/are rejected. | | | |
| 7) Claim(s) is/are objected to. | | , | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | |
| Application Papers | | | |
| 9)☐ The specification is objected to by the Examine | · | | |
| 10) The drawing(s) filed on is/are: a) acce | r. ented or h)□ objected to b | the Eveminar | |
| Applicant may not request that any objection to the | drawing(s) be held in abevance | e See 37 CED 1 95(a) | |
| Replacement drawing sheet(s) including the correct | ion is required if the drawing(s | 0: Oee 37 CFR 1.00(a). Nis objected to See 37 CED 1 121/6 | 1/ |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached | Office Action or form PTO-152 | 1). |
| Priority under 35 U.S.C. § 119 | | 102. | |
| | | | |
| 12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: | priority under 35 U.S.C. § 1 | 19(a)-(d) or (f). | |
| 1. Certified copies of the priority documents | t have been made to t | | • |
| 2. Certified copies of the priority documents | s have been received. | · · | |
| 2. Certified copies of the priority documents3. Copies of the certified copies of the priority | ity documents have been re | Discation No | |
| application from the International Bureau | (PCT Rule 17 2(a)) | ceived in this National Stage | |
| * See the attached detailed Office action for a list of | of the certified conies not re | reived | |
| | and deviated copies not to | colved. | |
| Attachment(s) | | | |
| 1) Notice of References Cited (PTO-892) | Δ\ | , , , , , , , , , , , , , , , , , , , | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/N | mary (PTO-413) fail Date | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6-18-04</u> . | 5) Notice of Infor 6) Other: | mal Patent Application (PTO-152) | |

Art Unit: 1746

DETAILED ACTION

Applicant's amendments and remarks filed September 2, 2004 have been acknowledged by the examiner and entered. Claims 3-19, and 23-30 have been canceled and claims 1-2, 20-22, 31-43 are pending in this application for consideration.

Claim Rejections - 35 USC § 112

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 cited a limitation "durable", which introduces new matter and not supported by the original disclosure.

Claim Rejections - 35 USC § 112

Claim 37-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 37, 40, 41, and 42 recites the limitation "composition" in line 1. It is not clear that this is a cleaning composition or a coating composition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. \S 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1746

(c) he has abandoned the invention.

- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(f) he did not himself invent the subject matter sought to be patented.

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Claim 1-2, 31-36 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al.

Tanaka et al (6, 183,872) disclose a surface treating composition of silicon-containing organic fluoropolymers which are applicable to material such as house hold articles over a wide range and which have excellent antifouling property. The anti-fouling is used to mean both property to reject deposition of fouling matter and property to readily release a deposited fouling matter on washing. The exposed surface of substrates tend to be contaminated by deposits of the airborne dust particles. Therefore, those substrates must be protected against the fouling and in addition rendered ready to wipe off fouling and other deposits (see abstract, col. 1, lines 58-67). To the silicon-containing organic fluoropolymer according to the first aspect of the invention can be added in use finely divided powders of fillers such as silica, alumina, titanium dioxide, carbon, cement, etc.; alkoxides of titanium, aluminum, silicon, etc.; or fluororesins such as low-molecular-weight polytetrafluoroethylene, tetrafluoroethylene-hexafluoropropylene copolymer, etc. as a hardness regulator or extender. In addition, a conventional crosslinking agent may be added for regulating hardness. The substrate surface can be coated with the silicon-containing

Art Unit: 1746

organic fluoropolymer for forming a layer from said silicon-containing organic fluoropolymer. The coating technology used includes but is not limited to spray coating, spin coating, dip coating, roll coating, gravure coating, and curtain flow coating, among other coating techniques. Dilution of the polymer with a solvent beforehand makes coating easier. There is no particular limitation on species of said solvent used for this purpose. For example, perfluorohexane, perfluoromethylcyclohexane, perfluoro-1,3-dimethylcyclohexane, dichloropentafluoropropane (HCFC225), etc. can be mentioned (see col. 8, lines 37-56).

Tanaka et al disclose all the limitation as claimed herein. Therefore, Tanaka et al anticipate the claimed process.

Claim 1-2, 20-22, 31-36 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Piacenti et al.

Piacenti et al (4,902,538) disclose a method of coating material with a coating composition comprising polytetrafluoroethylene or a tetrafluoroethylene copolymer, wherein perfluoropolyether or fluoropolyether having a chain end constituted by a functional group capable of forming a chemical or physical bond. The average molecular weight of the perfluoropolyether or fluoropolyether within the range of from 500 to 20,000. The fluorinated compound has general formula as claimed herein are disclosed (see claims).

The application of protective composition is carried out by any convenient means such as spraying an atomized, liquid stream or by spreading by brush (see col. 8, lines 30-34).

The protective composition is removed from the material and structures with 1,1,2-trichloro-1,2,2-trifluoroethane solvent (see col. 8, lines 41-51).

Art Unit: 1746

The method of forming a coating such as fluoropolyether with perfluoroalkyl end group was applied with brush on a surface and thereafter cleaning the surface in order to remove any dust or foreign substance are performed (see Example 6). Piacenti et al disclose all the limitation as claimed herein. Therefore, Piacenti et al anticipate the claimed process.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co., 148 USPQ 459, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or unobviousness.

Claims 1-2 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Norman et al.

Norman et al (4,347,2660) disclose a method of treating surface such as automobile by spraying a polymer protective coating contains fluorinated surfactant. The coating also contains silicone surfactant. The protective coating is removed from the surface after exposure to soiling conditions with water (see abstract and claims).

A feature of the Norman et al invention is the fact that the articles to be protected do not have to have their surfaces cleaned before the protective film is applied. Indeed the aqueous

Art Unit: 1746

film-forming solution wets an automobile surface better when that surface is covered with road dust as compared to when that surface is perfectly clean. Moreover the flushing off of the water-dispersible film removes considerable road dust and the like so that the protected surface is significantly cleaned by the treatment of the present invention.

In order to effectively cover water-repellent surfaces such as heavily waxed or polished automobile exteriors, the film-forming coatings should contain a significant amount of leveling agent. Thus about 0.02% to about 1% of fluorinated surfactant enables the film to be applied to a large automobile by a very brief spray treatment taking only a few minutes. The film so applied is self-leveling and will spread to cover the entire automobile surface even if the automobile's exterior paint is well waxed and shined, or has a shined silicone polish coating (see col. 1, lines 42-51).

The pre-coat of the present invention, when applied to a window, can make it difficult to see clearly through the window. It is accordingly helpful to leave some window area uncoated where the automobile is to be driven from the pre-coat station to the asphalt-applying station or from the asphalt-applying station. Rolling down a window of the automobile after the window has been pre-coated will generally cause some of that pre-coat to be scraped from the window by the weatherstrip normally engaging its lower portion. Windows are readily cleaned of any asphalt overspray they may receive, as by a dab with a kerosene-wetted cloth (see col. 3, lines 21-32).

The reference fails to specify indoor household surface.

It would have been obvious at the time applicant invented the claimed process to utilize Norman et al process of applying a protective coating on a surface such as automobile surface

Art Unit: 1746

including window of automobile and then removing the coating with water for the purpose of protecting and cleaning indoor household surfaces. Since windows of the automobile are glass and indoor household includes glass surfaces. One of ordinary skill in the art would use the Norman et al process for cleaning and protecting the indoor house hold surfaces form dust and other contaminants. Norman et al disclose that solvent such as kerosene may be used to remove coating and asphalt overspray. Therefore, Norman et al meet the claim 20 limitations.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Norman et al in view of Shank.

Norman et al were discussed <u>supra</u>. However, the reference fails to disclose fluorinated solvent as a cleaning agent for removing protective coating.

Shank (6,478,880) disclose a method for cleaning fluorinated oils (coating) from surfaces by contacting a composition comprising fluorinated compound and fluorinated aromatic compound (see abstract, and claims)

It would have been obvious at the time applicant invented the claimed process to use fluorinated compound as a solvent as disclosed by Shank in the process of Norman et al for the purpose of removing coating because Shank disclose that fluorinated compound composition serve as a solvent cleaners for fluorinated oils (coating). Therefore, one of ordinary skill in the art would have reasonable expectation that fluorinated compound composition would remove protective coating from the household surfaces, which is contaminated with dust and the like as Norman et al remove protective coating and asphalt overspray with kerosene solvent after coating is contaminated.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Norman et al in view of Shank as applied to claim 21 above, and further in view of Silvani et al.

Art Unit: 1746

Norman et al and Shank were discussed <u>supra</u>. However, the references fail to disclose (per)fluoropolyether as a fluorinated compound.

Silivani et al (6,262,006) disclose solvent comprising perfluoropolyether for removing traces of oils, greases, waxes (see abstract and col. 1, lines 6-14).

It would have been obvious at the time applicant invented the claimed process to utilize perfluoropolyether as disclosed by Silivani et al for removing coating such as oil in the process of Norman et al for the purpose of removing coating from the household surfaces. One of ordinary skill in the art would have reasonable expectation that perfluoropolyether would remove protective coating from the household surfaces.

Response to Applicant's Arguments

Applicant argued that Norman et al do not teach or suggest applying a coating composition to a surface that forms a durable protective layer. Norman et al disclose a temporary coating that is removed with water, leaving behind an unprotected surface.

This argument is not persuasive because the claim do not recite any step where it is disclosed that the coating can not be removed with water. Further, "durable" is relative term as claimed herein since durability is not defined in the disclosure and Norman et al coating is durable before it is not removed by any means. Therefore, Norman et al process still read on the claimed process.

Applicant's arguments with respect to claims 1-2, 20-22 and 31-43 have been considered but are most in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, THIS ACTION IS MADE FINAL. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

Art Unit: 1746

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saeed T. Chaudhry whose telephone number is (571) 272-1298. The examiner can normally be reached on Monday-Friday from 9:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Michael Barr, can be reached on (571)-272-1414. The fax phone number for non-final is (703)-872-9306.

When filing a FAX in Gp 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-1700.

Saeed T. Chaudhry
Patent Examiner

MICHAEL BARR SUPERVISORY/PATENT EXAMINER